of hiking and camping equipment more carefully would do well to purchase the publication *Hiking, Camping, and Mountaineering Equipment* that is issued by the Potomac Appalachian Trail Club of Washington, D.C. This bulletin priced at \$1 is a 60-page compendium of tested equipment and food with the sources of supply and the prices shown. Used extensively throughout the United States, it is revised approximately every 2 years.

You now know something about the Appalachian Trail, the longest continuous marked footpath in the world.

Perhaps you now have the guidebook, an oil company road map, and a more detailed map—such as a U.S. Geological Survey or a U.S. Forest Service map. Make arrangements with a friend, member of your family, or office acquaintance and explore a section of this famous footpath. Good hiking!

The Ski Patrol and Safety in the Snow

NORMAN A. BERG



AMERICA'S ski slopes are safer than ever today thanks to the ski patrol. More than 9,000 unpaid volunteers in about 600 separate patrols help keep skiing safe for both skilled skiers and "dopes on the slopes." Over a thousand ski patrollers are women. There are also

junior patrolmen, 12 to 17 years old. The ski patrol does its job in dozens of ways—by first aid and rescue operations; making "sweeps" of ski runs each night to be sure no one is left lying in the snow with a broken leg; helping with bindings, messages, and directions; and constantly fostering greater skiing safety.

Some patrolmen are hired by ski facility operators in order to provide protection for their patrons.

The work of the ski patrol has become increasingly important due to the fast increasing popularity of skiing. More people, of all ages, get into the action each year. Since 1950, participation has grown annually by some 10 to 15 percent. Now there are nearly 5 million skiers.

Modern snowmaking equipment is extending the skiing season. And it also

makes skiing possible in places where the sport had previously not existed.

The ski patrol was born of need. Back in 1938, a New York insurance broker, Charles Minot Dole, fractured an ankle on one of New England's ski slopes. For an hour he lay in the snow and cold, while a friend, Frank Edson, went for help. Several hours later, Dole reached a doctor after a ride down the hill on a piece of corrugated tin. He did not have the benefit of a splint on his broken ankle. Later, still encased in a cast, he received word that Edson had died in a similar accident. Finally up and around again, Dole was determined to find some way to prevent skiing accidents. When they did occur, he wanted the skier to receive the care needed.

"Minnie" Dole carried his campaign to other skiers in each section of the land.

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Norman A. Berg is *Deputy Administrator* for Field Services, Soil Conservation Service. He helped expand the snow survey network in Idaho after World War II, and for several years was an active snow surveyor.

Gradually he gained support that in working for safety on skis, skiers would be protecting both themselves and their favorite sport. And slowly the National Ski Patrol System—a cooperative effort which was organized by skiers—took form.

In 1939–40, the National Red Cross created the initial "Winter Manual" as a guide for training patrols in the care of winter accident victims.

Following World War II, growth of the patrol system kept pace with the public's booming interest in skiing.

Ski patrollers cooperate with national forest and park services, safety councils, and the National Ski Association.

SKI SLOPE DOPE

Ski slopes are lands of many uses. They produce trees, serve as watersheds, and may provide grazing for livestock and big game. Recreational skiing is harmonious with multiple land use. The snow cover yields moisture for next season's crops. Access roads serve both skiers and those who harvest the timber. And the ski lifts carry the summer visitor as well as winter vacationer to the "top of the world" for panoramic views.

A typical skiing area includes land for slopes, housing, and parking facilities. Ski areas need 100 acres or more of 10 to 60 percent slopes with north to northeast exposures. Northwest exposure can be used under excellent climate conditions. Other favorable soil properties for skiing areas are: Adequate soil depth to grow grass to prevent slippage and erosion, medium texture, and good drainage. Water areas and water impoundment sites are needed for artificial snowmaking.

Several acres of relatively level land adjacent to the slopes are also needed for the ski lodge and parking facilities.

The ski patrol is fundamentally a rescue organization. It warns of dangerous conditions. And at the same time, it tries to eliminate hazards if possible.

Those who wear the patrol badge and parka must be certified for competence.

The ski patrol leader and at least two

members of each patrol have to meet the National Ski Patrol System standard requirements for first aid training and for skiing ability before the patrol can be accepted for national registration.

"National Patrolman" is an honorary appointive position. All U.S. Forest Service snow rangers are automatically eligible for the badge of a National Patrolman, and many of the Soil Conservation Service's snow surveyors also qualify.

Traffic on the ski slopes is often similar today to the jams on highways. Skiing is fun and can be perfectly safe, but only if ski safety is learned and observed by everyone from novice to expert. The ski patrol has some basic rules to help you enjoy skiing. They are:

• Make sure all your equipment is in good condition and adequate for you. Use your safety straps.

• Find out the proper way to carry your equipment.

• Never ski a hill you aren't ready to handle. Proper instructions will help you to enjoy it.

- Learn how to use tows and lifts properly. Loose clothing or long hair, unless properly worn, can entangle you with the tow or lift. Keep ski tips up when getting on or off chair lift. Make certain that nothing will catch when you get off a tow.
 - Learn how to fall properly.
- If you fall, get up immediately and go to the side of the slope to make any necessary adjustments.
- If you make a "sitzmark" (hole in the snow), fill it up so the next skier won't trip on it.
 - Don't swing poles above your waist.
- Yield to the skiers downslope. A "track left" or a "track right" warning doesn't give you the right of way.
- Don't ski when you are tired. Never ski off alone.
 - Ski in control and enjoy yourself.

The National Ski Patrol faces a new problem with the use of one-man and two-man snow machines for recreation purposes in the mountains. In 1965, some 500 people on 250 snow machines made a trip the same day into Yellowstone Park in deep snow during March. This new type of recreation creates an obligation



Snow ranger and a ski patrolman demonstrate first aid for a ski accident victim. Winter Park Ski Area, Arapaho National Forest, Colo.

on both private and public lands to see that safe routes are provided and minimum training standards met before the recreationist ventures into the mountains in the middle of winter.

Ranch and farm operators, living close to good snow machine hills, can tap the income-producing potential of this new sport by providing sleeping space, servicing of equipment, safe traveling areas, and possibly eating facilities. Oversnow machine clubs are growing with fantastic speed. They may even match the powerboat devotees in numbers in the next few years. Yet hazards are far greater on the snow than in boating because of the remote terrain, the cold, high-speed winter storms, and lack of training.

An entire new technique of mounted one-man oversnow machine patrols is becoming necessary. These ski patrolmen will need to be highly trained in skiing, survival, avalanche, mountain climbing, and the operation of oversnow machines.

They also have to know the terrain

extremely well and must map and mark avalanche paths on all routes.

A great deal of this work will be in the national forests; however, many private lands will be used for oversnow recreation activities.

These private lands may be developed first because the oversnow machines are not compatible to ski areas. They leave tracks in the snow that trip skiers and thus are barred from operating in and around ski resorts, except for maintenance and for emergency purposes.

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The next time snow floats gently from the sky, observe carefully. The crystals are hexagonal.

If you ski, observe carefully; the National Ski Patrol badge is also hexagonal. The National Ski Patrol System's rust colored parka is the symbol—coast to coast—of active ski patrolmen. Its wearer could be your own neighbor, a "Good Samaritan of the Snow."